REMARKS

In the Official Action, the Examiner rejected claims 1-27. Reconsideration of the application as amended is respectfully requested.

Rejections under 35 U.S.C. § 102

The Examiner rejected claims 1, 3, 4, 7-10, 13 and 20 under 35 U.S.C. § 102(e) as being anticipated by Ishikawa et al. (U.S. Pat. No. 6,266,711). With specific regard to independent claims 1 and 20, the Examiner stated:

> Regarding claims 1 and 3, Ishikawa et al. teaches a method comprising: coupling an option pack to a main unit [Figure 2 and column 4, lines 5-10], the option pack comprising a first memory device [element 31 in Figure 2] configured to store one or more application and drivers associated with the one or more applications [column 4, line 66 - column 5, line 25 and column 10, lines 19-30], and a second memory device [element 31 in Figure 2] configured to store identification data [column 6, lines 1-24], the main unite comprising a device manager [control unit] configured to receive the identification data [communication service ID] from the second memory device [column 6, lines 1-24], a power supply [column 5, line 35], and a third memory [element 25 in Figure 2]; transmitting the identification data from the second memory device to the device manager [column 6, liens 1-24]; and downloading the one or more applications and associated drivers from the first memory device to the third memory device [column 8, lines 21-45].

> Ishikawa et al. does not explicitly teach storing the identification data in a second memory device. However, it is inherent in the teachings of Ishikawa et al. that the identification data would have to be stored in a memory device located on the option pack, such as element 31 in Figure 2.

> Regarding claim 20, Ishikawa et al. teaches method of connecting an option pack to a main unit comprising: Powering on the main unit [column 5, lines 35-37]; determining if there is an option pack coupled to the main unit [column 4, lines 5-10 and column 5, lines 63-67]; transmitting identification information from the option pack to the main unit [column 6, lines 1-24]; and downloading one or more software applications and associated drivers from the option pack to the main unit [column 8, lines 21-45].

8

Ishikawa et al. teaches sending a notification signal from a connector connection detecting unit when the option pack is connected to the main unit [column 5, lines 64-67], but does not specifically teach sending an interrupt signal to the control unit of the main unit. However it is inherent in the teachings of Ishikawa et al. that the notification signal is an interrupt type signal. The purpose of an interrupt signal is to command the control unit to stop immediately service the option pack once the option pack is connected to the main unit. Ishikawa et al. teaches that the control unit detects identification information immediately after if receives the notification signal [column 6, lines 1-24].

Applicants respectfully traverse this rejections. Anticipation under Section 102 can be found only if a single reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 U.S.P.Q. 773 (Fed. Cir. 1985). For a prior art reference to anticipate under Section 102, every element of the claimed invention must be identically shown in a single reference. *In re Bond*, 910 F.2d 831, 15 U.S.P.Q.2d 1566 (Fed. Cir. 1990). To maintain a proper rejection under Section 102, a single reference must teach each and every element or step of the rejected claim. *Atlas Powder v. E.I. du Pont*, 750 F.2d 1569 (Fed. Cir. 1984). Thus, if the claims recite even one element not found in the cited reference, the reference does not anticipate the claimed invention.

Claim 1 recites an option pack comprising "a *first memory device* configured to store one or more applications and drivers associated with the one or more applications, and a *second memory device* configured to store identification data." (Emphasis added). Accordingly, the recited option pack includes a first memory device *and* a second memory device, each configured to store different types of information. Though, for the reasons set forth below, Applicants submit that claim 1, as filed, is patentably distinct from the cited reference, claim 1 has been amended to set forth the recited subject matter more clearly. Claim 1, as amended, further recites "wherein the first

memory device is different from the second memory device." Accordingly, claim 3 has been cancelled.

In the Office Action, the Examiner cited the program memory 31 on the communication modem 11 in the Ishikawa reference as both the first memory device and the second memory device recited in claim 1. Applicants respectfully submit that the rejection is improper. Applicants assert that the Examiner has failed to appreciate certain advantages that may be realized through the presently recited structure. For example, by storing applications and drivers on a first memory device and storing identification data on a second, independent memory device, the option pack can be configured such that the devices are utilized on different buses, as illustrated in Fig. 3-5 and described in the specification with reference thereto. Accordingly, as described in various embodiments throughout the present specification, certain advantages may be realized in a system having a first memory device for storing applications and drivers and having a second, independent memory device, for storing identification data. Applicants respectfully submit that by correlating each of the recited first memory device and second memory device with the program memory 31 disclosed in Ishikawa, the Examiner has essentially removed one of the novel aspects recited in the present claims.

Because the Ishikawa reference fails to disclose each and every element of claim 1, the Ishikawa reference cannot possibly anticipate the recited subject matter. Specifically, as discussed above, the Ishikawa reference does not disclose "a *first memory device* configured to store one or more applications and drivers associated with the one or more applications, and a *second memory device* configured to store identification data," as recited in claim 1. (Emphasis added). Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claims 1, 3, 4, 7-10 and 13.

To this point, in the Response to Arguments section of the Office Action, the Examiner

stated:

> Although there may be advantages to using two independent
> memory device, the examiner interprets the first and second memory
> devices of the applicant's invention to comprise a single memory
> device. Support for the interpretation can be found in claim 3.
> Claim 3 further defines the applicant's invention by specifying, "the
> first memory device and the second memory device comprise the
> same memory device."

Applicants respectfully assert that the Examiner's argument furthers the point that indeed

claim 1 is patentably distinct from the cited reference. The doctrine of claim differentiation

embodies the common sense notion that ordinary language of one claim should not be so

interpreted as to make another claim, such as a claim dependent on the first claim, identical in

scope. *See Total Containment, Inc. v. Environ Products, Inc.*, 921 F. Supp. 1355, 1385 (E.D. Pa.

1995), *aff'd*, 106 F.3d 427 (Fed. Cir. 1997). Under the doctrine of claim differentiation, claims are

presumed to be of a different scope. *See Telemac Cellular Corp. v. Topp Telecom, Inc.*, 247 F.3d

1316, 1325, 58 U.S.P.Q.2d 1545 (Fed. Cir. 2001); *See Wenger Manufacturing, Inc. v. Coating

Machinery Systems, Inc.*, 239 F.3d 1225, 57 U.S.P.Q.2d 1679 (Fed. Cir. 2001). "Under the doctrine

of claim differentiation, it is presumed that different words used in different claims result in a

difference in meaning and scope for each of the claims. This doctrine cannot be used to make a

claim broader than what is contained in the written description, ... but it prevents the narrowing of

broad claims by reading into them the limitations of narrower claims." *Clearstream Wastewater

Systems Inc. v. Hydro-Action Inc.*, 206 F.3d 1440, 1446, 54 U.S.P.Q.2d 1185, 1189 (Fed. Cir.

2000). "If we were to read [a] requirement into [a] limitation for all [a patent's] claims, we would

effectively be rendering [two claims] superfluous. This we will not do." *Xerox Corp. v. 3Com

Corp.*, 267 F.3d 1361, 1366, 60 U.S.P.Q.2d 1526 (Fed. Cir. 2001).

As stated by the Examiner, claim 1 has been interpreted such that each of the first memory device and the second memory device comprise the same memory device. This interpretation effectively renders claim 3 superfluous. This interpretation is wholly inconsistent with well-established practice. As disclosed in the present specification, and illustrated in the Figures, the first and second memory devices recited in claim 1 may be separate devices. By interpreting claim 1 to require that the first and second memory devices comprise the same device, the Examiner is narrowing the scope of the claim. Applicants respectfully assert that this claim interpretation is inconsistent with the specification and improperly narrowing. Nonetheless, claim 1 has been further amended to recite, "wherein the first memory device is different from the second memory device," and claim 3 has been cancelled. While Applicants maintain that claim 1, as originally filed, is not anticipated by the cited reference, it is clear that the amendment adequately distinguishes over the subject matter disclosed by the Ishikawa et al. reference. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claim 1.

Similarly, claim 20 has been amended to recite "transmitting identification information from a first memory device on the option pack to the main unit," and "downloading one or more software applications and associated drivers from a second memory device on the option pack to the main unit, wherein the first memory device is different from the second memory device." As discussed in detail above, the Ishikawa reference does not disclose independent memory devices for storing the identification information and the applications and drivers. Any interpretation to the contrary would be unnecessarily limiting and therefore, improper. Accordingly, the Ishikawa reference cannot possibly disclose transmitting identification information from the first memory device and downloading the applications and drivers from a second memory device on the option pack, as recited in claim 20. Accordingly, and for the reasons set forth above with respect to

independent claim 1, Applicants respectfully submit that independent claim 20 is also allowable.

Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claim 20.

Rejections under 35 U.S.C. § 103

The Examiner rejected dependent claims 2, 5, 6, 14-19 and 21-25 under 35 U.S.C. § 103(a)

as being unpatentable over Ishikawa et al. (U.S. Pat. No. 6,266,711). Applicants respectfully

traverse this assertion for the reasons discussed above with reference to the deficiencies of the

Ishikawa reference as applied to claims 1 and 20. Accordingly, based on the allowability of claims

1 and 20, all claims dependent thereon are also allowable. However, Applicants would like to

specifically address two of the Examiner's rejections. With regard to claims 16, 18, 22 and 23, , the

Examiner stated:

> It is well known in the art to determine if a power supply can
> provide enough power to perform a function before attempting to
> perform that function and notifying a user accordingly.

Further, in the Response to Arguments, the Examiner further stated:

> The examiner submits Jimbo et al., US Patent no. 6,173,408,
> as evidence that "determining if a power supply can provide enough
> power to perform a function before attempting to perform that
> function" is in fact, well known in the art. Specifically, Jimbo et al.
> teaches checking to make sure there is enough available power to
> execute an instruction before executing the instruction [column 10,
> lines 1-50].

Further, with regard to claims 17, 19, 24 and 25, the Examiner stated:

> It is well known in the art to determine if a memory has
> enough capacity to store a collection of data before attempting to
> write the collection of data to the memory.

Further, in the Response to Arguments, the Examiner further stated:

> The examiner submits Jimbo et al., US Patent no. 6,173,408,
> as evidence that "determining if a power supply can provide enough
> power to perform a function before attempting to perform that
> function" is in fact, well known in the art. Specifically, Jimbo et al.

teaches checking to make sure there is enough available power to execute an instruction before executing the instruction [column 10, lines 1-50].

Applicants respectfully traverse these rejection. The burden of establishing a *prima facie* case of obviousness falls on the Examiner. *Ex parte Wolters and Kuypers*, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). Obviousness cannot be established by combining or modifying the teachings of the prior art to produce the claimed invention absent some teaching or suggestion supporting the combination or modification. *See ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). Accordingly, to establish a *prima facie* case, the Examiner must not only show that the combination includes *all* of the claimed elements, but also a convincing line of reason as to why one of ordinary skill in the art would have found the claimed invention to have been obvious in light of the teachings of the references. *Ex parte Clapp*, 227 U.S.P.Q. 972 (B.P.A.I. 1985). When prior art references require a selected combination or modification to render obvious a subsequent invention, there must be some reason for the combination or modification other than the hindsight gained from the invention itself, i.e., something in the prior art as a whole must suggest the desirability, and thus the obviousness, of making the combination or modification. *See Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988).

As discussed above, it is clear that the Ishikawa reference does not disclose a first memory device and a second memory device as recited in independent claims 1 and 20. In addition, it is also clear that the Ishikawa reference does not disclose "determining whether the power supply in the main unit has enough power to activate the option pack fully," or "determining whether the third memory device on the main unit has enough memory capacity to receive the applications and

14

associated drivers stored on the first memory device of the option pack." The Examiner concedes that the Ishikawa reference does not disclose such features and takes Official Notice that such features are well known in the art. Indeed, even if the Ishikawa reference did disclose a mechanism for downloading applications from an option pack to a main unit, the applications are downloaded without any memory or power checks occurring subsequently. However, contrary to the Examiner's assertions, the cited references do not cure the deficiencies of the primary reference, nor is there any suggestion to combine the cited references in the manner recited.

With specific regard to claims 16, 18, 22 and 23, the claims generally recited subject matter relating to determining whether the power supply in the main unit has enough power to activate the option pack before downloading the one or more applications and associated drivers. For example, claim 16 recites, "determining whether the power supply in the main unit has enough power to activate the option pack fully." Claim 18 recites, wherein the downloading, "occurs after the device manager has determined that there is enough power in the power supply of the main unit to activate the option pack fully." Contrary to the Examiner's assertion, the Jimbo et al. reference does not disclose these features, nor does the Jimbo et al. reference provide any suggestion to modify or combine the reference with the primary reference, in the manner presently recited. At most, the Jimbo et al. reference merely discloses providing a program that regulates the total sum of power consumed by circuit blocks 101, 201 and 301 such that the total sum of the power does not exceed the maximum power consumption designated by LPWR. Col. 9, line 65 – col. 10, line 5. This power regulation is clearly distinguishable over determining whether a power supply in a main unit has enough power to fully activate an option pack, as recited in the present claims, much less that this determination is made *before* attempting to download applications and drivers, as further recited in the present claims.

15

Indeed, because the Jimbo et al. reference does not cure the deficiencies of the Ishikawa et al. reference, discussed above the respect to the respective independent claims, the cited combination cannot possibly render claims 16, 18, 22 and 23. Further, the Jimbo et al. reference does not disclose the subject matter additionally recited in claims 16, 18, 22 and 23, and therefore, the cited combination cannot possibly render the claims obvious for this additional reason. Still further, the Examiner has failed to provide a convincing line of reasoning as to why one of ordinary skill in the art would have been motivated to modify or combine the cited combination in the manner presently recited. Even if the Jimbo et al. reference did disclose a power supply check, Applicants submit that nothing in either of the references would suggest modifying the Jimbo et al. reference for use in a PDA and that a power supply check be implemented after an option pack is inserted into a main unit of the PDA, but before any applications or drivers are downloaded. For at least these addition reasons, claims 16, 18, 22 and 23 are allowable.

With specific regard to claims 17, 19, 24 and 25, the claims generally recited subject matter relating to determining whether a third memory device in the main unit has enough power to receive applications and associated drivers from the option pack before downloading the one or more applications and associated drivers. For example, claim 17 recites, "determining whether the third memory device on the main unit has enough memory capacity to receive the applications and associated drivers store on the first memory device of the option pack." Claim 19 recites, wherein the downloading, "occurs after the device manager has determined that the third memory device on the main unit has enough memory capacity to receive the applications and associated drivers." Contrary to the Examiner's assertion, the Otsuka et al. reference does not disclose these features, nor does the Otsuka et al. reference provide any suggestion to modify or combine the reference with Ishikawa, in the manner presently recited. The Otsuka et al. reference discloses a content providing system in which many unspecified users can arbitrarily use it to get (purshase) a recording medium

in which desired content has been downloaded, and the recording medium itself can be effectively used. *See* Abstract. While the Otsuka reference *may* disclose determining whether a disk 90 has enough memory capacity to download data, the Otsuka reference does not disclose checking the memory capacity on a main unit before downloading applications and drivers from an option pack of a PDA to a main unit. Therefore, the Otsuka et al. reference does not even disclose the additionally recited features of claims 17, 19, 24 and 25, much less cure the deficiencies discussed above with regard to the allowable base claims.

Indeed, because the Otsuka et al. reference does not cure the deficiencies of the Ishikawa et al. reference, discussed above the respect to the respective independent claims, the cited combination cannot possibly render claims 17, 19, 24 and 25. Further, the Otsuka et al. reference does not disclose the subject matter additionally recited in claims 17, 19, 24 and 25, and therefore, the cited combination cannot possibly render the claims obvious for this additional reason. Still further, the Examiner has failed to provide a convincing line of reasoning as to why one of ordinary skill in the art would have been motivated to modify or combine the cited combination in the manner presently recited. In other words, even if the Otsuka et al. reference does disclose a memory capacity check, Applicants submit that nothing in either of the references would suggest modifying the Otsuka et al. reference for use in a PDA and that a memory capacity check be implemented after an option pack is inserted into a main unit of the PDA, but before any applications or drivers are downloaded. For at least these addition reasons, claims 17, 19, 24 and 25 are allowable.

Accordingly, because the cited reference does not disclose all of the features recited in the respective independent claims, much less the additionally recited features of the dependent claims, claims 2, 5, 6, 14-19 and 21-25 are not rendered obvious by the Ishikawa reference.

Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claims 2, 5, 6, 14-19 and 21-25.

The Examiner rejected claims 12 and 26 under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa et al. in view of Maeda (U.S. Pat. No. 6,557,033). Specifically, with regard to independent claim 26, the Examiner stated:

> Ishikawa et al. and Maeda teach a method of connecting an option pack to a main unit, downloading drivers and applications from the option pack to the main unit, separating the option pack from the main unit and deleting the drivers and applications from the main unit's memory, as described above. Furthermore, it is inherent in the teachings of Ishikawa et al. and Maeda that a connection presence notification signal would be de-activated when the option pack is no longer connected to the main unit, since the notification signal reflects the presence of a connection between the main unit and the option pack. Disabling control buffers and terminating the functionality of the downloaded applications is also inherent in the teachings of Ishikawa et al. and Maeda. Any kind of control buffer or application used in the interactions between the main unit and the option pack is no long needed if the option pack is no longer interacting with the main unit.

Applicants respectfully traverse this rejection. Claim 26 recites, among other things, "removing the one or more applications and associated drivers from the main unit." The Examiner did not specifically cite a passage in either of the cited references as disclosing "removing the one or more applications and associated drivers from the main unit." Indeed, Applicants respectfully submit that neither of the cited references disclose such an act. The Examiner stated "any kind of control buffer or application used in the interaction between the main unit and the option pack is no longer needed if the option pack is no longer interacting with the main unit." The Examiner further stated, "the limitation of 'removing the one or more applications and associated drivers from the main unit' can be found in 'column 12, lines 20-53

and column 13, line 62 – column 14, line 15' of the Maeda reference." Applicants respectfully traverse the Examiner's assertion.

The Maeda reference merely discloses a device 100 connected to a host 102, wherein the device is capable of switching functions. *See* Abstract. When the device 100 switches functions, the power to the host 102 is reset and the driver associated with the previously run function is deleted from the memory in the host 102. Applicants respectfully assert that deleting a driver from memory in the Maeda system cannot be properly characterized as "removing the one or more applications and associated drivers from the main unit," the one or more applications and drivers having been previously downloaded from the option pack to the main unit, as recited in claim 26. Regardless, nothing in the Maeda reference suggests combining driver deletion from memory with the insertion and removal of an option pack from a main unit.

Because the cited references fail to disclose each of the elements recited in the independent claims, much less provide a suggestion to modify or combine the cited references in the manner recited in the present claims, the references cannot possibly render the claimed subject matter obvious. Accordingly, Applicants respectfully request withdrawal of the Examiner's rejection and allowance of claims 12 and 26.

The Examiner rejected claim 11 under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa et al., in view of Sugimura (U.S. Pat. No. 6,582,311). Further, the Examiner rejected claim 27 under 35 U.S.C. § 103(a) as being unpatentable over Ishikawa et al. and Maeda, in view of Sugimura. Applicants do not necessarily agree with the Examiner's assertions regarding the Sugimura reference. However, the point is moot as the Sugimura reference does not cure the deficiencies discussed above with regard to the primary reference. Accordingly, for at least the
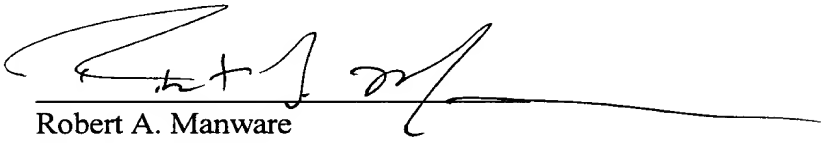
reasons set forth above with regard to the allowable base claims, Applicants respectfully request withdrawal of the Examiner's rejections and allowance of claims 11 and 27.

Conclusion

In view of the remarks set forth above, Applicants respectfully request allowance of claims 1, 2 and 4-27. If the Examiner believes that a telephonic interview will help speed this application toward issuance, the Examiner is invited to contact the undersigned at the telephone listed below.

Respectfully submitted,

Date: July 8, 2004

Robert A. Manware
Reg. No. 48,758
(281) 970-4545

HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, Colorado 8-527-2400